

CLAIMS

1. A coating agent for cellulose-bearing substrate surfaces comprising a liquid phase and binding agent, characterised in that the coating agent includes platelet-shaped pigments and a bonding agent, wherein the platelet-shaped pigments are corrosion-resistant and impermeable to UV light and wherein the bonding agent produces a bond between platelet-shaped pigments, binding agent and the cellulose-bearing substrate surface.

2. A coating agent as set forth in claim 1 characterised in that the platelet-shaped pigments are metal pigments with a corrosion-resistant coating.

3. A coating agent as set forth in claim 2 characterised in that the corrosion-resistant coating is selected from the group which consists of aluminum oxide layer, silicate layer, chromium oxide-bearing layer, acrylate layer and layers thereof arranged one above the other.

4. A coating agent as set forth in claim 2 or claim 3 characterised in that the metal pigments are produced from metals and/or metal alloys which are selected from the group consisting of aluminum, zinc, tin, copper, iron, titanium, steel and alloys thereof, preferably gold-bronze.

5. A coating agent as set forth in claim 4 characterised in that the metal pigments are silicate-coated aluminum, zinc, tin, copper, iron, titanium, steel and gold-bronze pigments.

6. A coating agent as set forth in one of the preceding claims characterised in that functionalised silane surface-modifying agents are applied to the corrosion-stable coating of the pigments.

7. A coating agent as set forth in one of claims 3 through 6 characterised in that color pigments are additionally incorporated into the corrosion-stable coating, preferably a silicate layer.

8. A coating agent as set forth in one of the preceding claims characterised in that the corrosion-resistant platelet-shaped pigments, preferably corrosion-stable metal pigments, are substantially circular or oval and are of a maximum diameter of between 1 and 250 μm , preferably between 5 μm and 70 μm .

9. A coating agent as set forth in one of the preceding claims characterised in that the bonding agent is a metal complex with one or more organic ligands, wherein the metal complex as one or more central ions contains one or more metal cations which are selected from the group consisting of B, Al, Si, Ge, Sn, Pb, Ti, Zr, V, Cr, Mo, Mn, Fe, Zn and mixtures thereof and the metal complex has at least two functional groups or ligands which with hydroxyl groups form a complex or produce a covalent bond or are displaced out of the complex by hydroxyl groups with the formation of an oxygen-central cation bond.

10. A coating agent as set forth in claim 9 characterised in that at least two hydrolysable inorganic or organic ligands or two hydroxyl ions are co-ordinated on the one metal cation or the plurality of metal cations of the metal complex.

11. A coating agent as set forth in claim 9 or claim 10 characterised in that at least one organic ligand is co-ordinated on the one metal cation or the plurality of metal cations of the metal complex by way of a carboxyl group or a plurality of carboxyl groups.

12. A coating agent as set forth in one of preceding claims 9 through 11 characterised in that at least one organic ligand is hydrophobic.

13. A coating agent as set forth in one of preceding claims 9 through 12 characterised in that at least one organic ligand has at least one functional group which can react with optional constituents of the coating agent.

14. A coating agent as set forth in one of preceding claims 9 through 13 characterised in that the metal complex can be obtained by the following steps:

(a) neutralising a carboxylic acid which has between 3 and 30 carbon atoms, with a volatile basic nitrogen compound, preferably ammonia and/or a volatile amino compound,

(b) adding at least one water-soluble salt of a metal which is selected from the group consisting of B, Al, Si, Ge, Sn, Pb, Ti, Zr, V, Cr, Mo, Mn, Fe, Zn and mixtures thereof, to the mixture from step (a), and

(c) optionally adding a volatile basic nitrogen compound, preferably ammonia and/or a volatile amine compound, to the mixture from step (b).

15. A coating agent as set forth in one of claims 1 through 8 characterised in that the bonding agent is a functionalised organosilane R_nSiX_{4-n} , wherein n = between 0 and 2 and R stands for a substituted or unsubstituted organic residue, preferably alkyl, aryl, alkylaryl or arylalkyl, and X stands for functional groups and/or for substituted or unsubstituted organic residues which form complexes with hydroxyl groups and/or react with hydroxyl groups forming a covalent bond and/or are displaced out of the organosilane by hydroxyl groups with the formation of an oxygen-silicon bond.

16. A coating agent as set forth in one of claims 1 through 8 characterised in that contained in the coating agent as a bonding agent is a metal complex as set forth in one of claims 9 through 14 and a functionalised silane as set forth in claim 15.

17. A coating agent as set forth in one of claims 1 through 16 characterised in that the liquid phase is selected from the group which consists of water, aqueous phase, organic solvent or mixtures thereof, preferably mixtures which substantially comprise water.

18. A coating agent as set forth in claim 13 characterised in that the at least one ligand with the at least one functional group is reacted with aminofunctional silicone oil, silicone resin or carboxylfunctional wax.

19. A coating agent as set forth in one of the preceding claims characterised in that the coating agent additionally contains reactive binding agent with at least one free carboxyl group, hydroxyl group and/or amino group.

20. A coating agent as set forth in one of the preceding claims characterised in that contained in the coating agent are between about 2 and about 20% by weight of corrosion-resistant pigments, preferably between about 4 and about 16% by weight, with respect to the total weight of the coating agent.

21. A coating agent as set forth in one of the preceding claims characterised in that contained in the coating agent is between about 10% by weight and 20% by weight of binding agent, with respect to the total weight of the coating agent.

22. A coating agent as set forth in one of the preceding claims characterised in that the total solid content in the coating agent is between about 10 and 35% by weight, preferably between about 15 and 30% by weight, with respect to the total weight of the coating agent.

23. A coating agent as set forth in one of the preceding claims characterised in that the coating agent further contains additives such as

fungicides, insecticides, algicides, thickening agents, anti-foam agents, anti-settlement agents, auxiliary binding agents and/or dissolution aids.

24. A coating agent as set forth in one of the preceding claims characterised in that the cellulose-bearing substrate surface contains wood, wood chip-bearing materials, paper and/or paper-bearing materials.

25. Use of a coating agent as set forth in one of claims 1 through 24 for coating cellulose-bearing substrate surfaces, preferably wood, wood chip-containing materials, in particular building materials, or paper or paper-bearing materials.

26. Use of a coating agent as set forth in claim 25 for priming cellulose-bearing substrate surfaces for the production of weathering-stable building elements and facade claddings.

27. A cellulose-bearing substrate surface characterised in that the substrate surface is coated with a coating agent as set forth in one of claims 1 through 24.

28. A cellulose-bearing substrate surface as set forth in claim 27 characterised in that the substrate surface is the surface of wood material, wood-bearing material, paper, paper-bearing material or chemically and/or physically modified wood material.